

REMARKS/ARGUMENTS

This amendment responds to the Office Action dated October 9, 2007, in which the Examiner rejected claims 1-8 under 35 U.S.C. § 103.

Attached to this response are FIGS. 6-10 which have been amended to label them prior art. Applicant respectfully requests the Examiner approves the corrections.

As indicated above, minor informalities in the Specification have been corrected. Therefore, Applicant respectfully requests the Examiner approves the correction.

Applicant thanks the Examiner for acknowledgement of the priority documents. However, Applicant believes that box 12(a)(3) should be marked on PTO-326 rather than box 12(a)(1).

As indicated above, claims 1 and 5 have been amended for stylistic reasons. The amendments are unrelated to a statutory requirement for patentability.

Claim 1 claims an adaptive noise reduction method and claim 5 claims an adaptive noise reduction apparatus. The adaptive noise reduction apparatus and method includes an adaptive filter and composition means. The adaptive noise reduction apparatus and method also include a ring-shaped memory, a read-address generator and a write-address generator. The read-address generator generates read addresses of the ring-shaped memory. The write-address generator generates write addresses different from the read addresses. A relative phase of address offset between the read-address and the write-address is variable.

By having a relative phase of address offset between the read and write addresses being variable as claimed in claims 1 and 5, the claimed invention provides an adaptive noise reduction method and apparatus in which adaptive filter coefficients can follow a variable periodic noise

whose period changes rapidly. The prior art does not show, teach or suggest the invention as claimed in claims 1 and 5.

Claims 1-8 were rejected under 35 U.S.C. § 103 as being unpatentable over *Tamamura, et al.* (U.S. Patent No. 5,426,704), in view of *Umemura, et al.* (U.S. Patent No. 5,708,637).

Tamamura, et al. appears to disclose an address generating circuit 43 which generates address values equal to a count value of a counter 41 (Col. 9, lines 28-29). An address generating circuit 61, from tap value updating section 6, generates addresses when the count value output from counter 41 varies (Col. 10, lines 4-7).

Thus, *Tamamura, et al.* merely discloses that the counter 41 is used to generate the read-addresses from address generating 43 as well as the write-addresses from address generating circuit 61. Thus, nothing in *Tamamura, et al.* discloses, shows, teaches or suggests that the relative phase of the address offset between the read-addresses and the write-addresses is variable as claimed in claims 1 and 5. Rather, *Tamamura, et al.* merely discloses the counter 41 is used to generate the read and write addresses.

Umemura, et al. merely discloses a ring buffer. Nothing in *Umemura, et al.* shows, teaches or suggests using a ring buffer in adaptive noise reduction apparatus. Rather, *Umemura, et al.* merely discloses a ring buffer.

A combination of *Tamamura, et al.* and *Umemura, et al.* would not be possible since *Umemura, et al.* is not directed to an adaptive noise reduction apparatus/method. Even assuming *arguendo* that the references would be combined, nothing the combination of the references discloses an adaptive noise reduction apparatus/method in which relative phase of address offset between read and write addresses is variable as claimed in claims 1 and 5. Therefore, Applicant

respectfully requests the Examiner withdraws the rejection to claims 1 and 5 under 35 U.S.C. § 103.

Claims 2-4 and 6-8 depend from claims 1 and 5 and recite additional features. Applicant respectfully submits that claims 2-4 and 6-8 would not have been obvious within the meaning of 35 U.S.C. § 103 over *Tamamura, et al.* and *Umemura, et al.* at least for the reasons as set forth above. Therefore, Applicant respectfully requests the Examiner withdraws the rejection to claims 2-4 and 6-8 under 35 U.S.C. § 103.

New claims 9-17 have been added and recite additional features. Applicant respectfully submits that these claims are also in condition for allowance at least for the reasons as set forth above, and since nothing in the references shows, teaches or suggests adaptive coefficients are read from and written into respective specified addresses of the read or write addresses within a predetermined timing within one period as claimed in claims 11 and 12 or the other features claimed in claims 13-17.

The prior art of record, which is not relied upon, is acknowledged. The references taken singularly or in combination do not anticipate or make obvious the claimed invention.

Thus it now appears that the application is in condition for a reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

CONCLUSION

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is requested to contact, by telephone, the Applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicant respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 50-0320.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Applicant

Date: January 7, 2008

By



Ellen Marcie Emas
Reg. No. 32,131
(202) 292-1530